

Amendment to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1-51. (canceled)

52. (previously presented) A method of detecting a lysosomal storage disorder (LSD), monitoring the progress of a LSD or the efficacy of treatment of a LSD in a human or animal subject, the method comprising assaying the level of Lamp-1 (lysosome-associated membrane protein type-1) in a biological sample derived from the subject, wherein the biological sample is a blood, serum, plasma or urine sample; and an increase in the level of Lamp-1 in the subject relative to the corresponding level of Lamp-1 in a non-affected individual or population is indicative of a LSD.

53-54. (canceled)

55. (previously presented) The method according to claim 52, wherein the biological sample is a blood, plasma or urine sample.

56-57. (canceled)

58. (previously presented) The method according to claim 52, wherein the biological sample is a blood, plasma, or serum sample.

59. (previously presented) The method according to claim 55, wherein the biological sample is a blood sample.

60. (previously presented) The method according to claim 55, wherein the biological sample is a urine sample.

61-62. (canceled)

63. (previously presented) The method according to claim 52, wherein the LSD is selected from the list set forth in Table 1.

64. (previously presented) The method according to claim 63, wherein the LSD is selected from the group consisting of MPS I, MPS II, Gaucher disease, Pompe disease and Salla's disease.

65. (previously presented) The method according to claim 52, wherein the step of assaying the level of Lamp-1 comprises measuring the enzyme activity of Lamp-1 in the biological sample.

66. (previously presented) The method according to claim 52, wherein the step of assaying the level of Lamp-1 comprises contacting the biological sample with one or more antibodies specific for Lamp-1 for a time and under conditions sufficient for the formation of a complex to occur.

67. (canceled)

68. (previously presented) The method according to claim 66, wherein the one or more antibodies are monoclonal antibodies.

69. (previously presented) The method according to claim 66, wherein the one or more antibodies is/are labeled with a reporter molecule.

70. (previously presented) The method according to claim 66, further comprising the step of contacting the complex formed between Lamp-1 and one of the one or more antibodies with a labeled antibody for a time and under conditions sufficient for binding to occur.

71. (previously presented) The method according to claim 70, wherein the labeled antibody is labeled with a reporter molecule.

72. (currently amended) The method according to claim ~~69~~71, wherein the reporter molecule is an enzyme, a fluorophore or a radionuclide molecule.

73. (previously presented) The method according to claim 72, wherein the enzyme, fluorophore or radionuclide molecule is selected from the group consisting of horseradish peroxidase, glucose oxidase, β -galactosidase, alkaline phosphatase, fluorescein, Eu^{3+} and other lanthanide metals, and rhodamine.

74. (previously presented) The method according to claim 52, wherein

- (a) the LSD is selected from the list set forth in Table 1;
- (b) the subject is a human; and
- (c) the biological sample is a human blood, plasma or urine sample.

75-92. (canceled)

93. (previously presented) A method for detecting a lysosomal storage disorder (LSD), comprising assaying LAMP-1 (lysosome-associated membrane protein type-1) in a sample of blood obtained from a patient that is asymptomatic for a LSD, an increase in the level of LAMP-1 in the patient relative to the corresponding level of LAMP-1 in a non-affected individual or population being indicative of a LSD.

94. (canceled).

95. (previously presented) A method of detecting a lysosomal storage disorder (LSD), monitoring the progress of a LSD or the efficacy of treatment of a LSD in a human or animal subject, the method comprising assaying the level of Lamp-1 in a biological sample derived from the subject, wherein

the LSD is selected from the group consisting of Galactosialidosis, Gaucher disease, CM1-gangliosidosis, α -Mannosidosis, Mucopolysaccharidosis (MPS) I, MPS II, MPS IIIA, MPS IIIB, MPS IIIC, MPS IIID, MPS IVA, MPS VI, Multiple sulphatase

deficiency, Sandhoff disease, Sialic Acid Storage disease, Tay-Sachs disease, Wolman disease and Salla's disease; and

an increase in the level of Lamp-1 in the subject relative to the corresponding level of the LSD marker in a non-affected individual or population is indicative of a LSD.

96. (canceled)

97. (previously presented) The method of claim 95, wherein the LSD is selected from the group consisting of MPS I, MPS II, Gaucher disease, Pompe disease, and Salla's disease.

98. (previously presented) The method according to claim 95, wherein the biological sample comprises blood, plasma, serum, urine, a fibroblast cell, a fibroblast cell culture or a fibroblast cellular extract.

99. (previously presented) The method according to claim 98, wherein the fibroblast cell, fibroblast cell culture or fibroblast cellular extract is a Pompe, Salla, MPS II or MPS VI fibroblast cell, cell culture or cellular extract.

100. (previously presented) The method according to claim 98, wherein the biological sample is a blood, plasma, serum or urine sample.

101. (previously presented) The method according to claim 96, wherein the subject is a human.

102. (previously presented) A method of detecting a lysosomal storage disorder (LSD), monitoring the progress of a LSD or the efficacy of treatment of a LSD in a human or animal subject, the method comprising assaying the level of Lamp-2 (lysosome-associated membrane protein type-2) in a biological sample derived from the subject, wherein the LSD is selected from the group consisting of Pompe disease, Gaucher disease and a Mucopolysaccharidosis (MPS) disease; and

an increase in the level of Lamp-2 in the subject relative to the corresponding level of Lamp-2 in a non-affected individual or population is indicative of a LSD.

103. (previously presented) The method of claim 102, wherein the LSD is Gaucher disease or MPS I.

104. (previously presented) The method of claim 102, wherein the biological sample comprises blood, plasma, serum, urine, a fibroblast cell, a fibroblast cell culture or a fibroblast cellular extract.

105. (previously presented) The method according to claim 104, wherein the biological sample is a blood, plasma, serum or urine sample.

106. (previously presented) The method according to claim 102, wherein the subject is a human and the biological sample is a human blood, plasma, serum or urine sample.